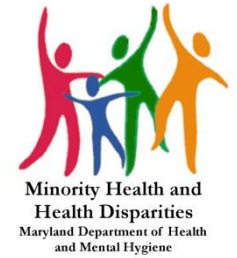


2014 Maryland Diabetes Symposium

Impact of Social Determinants of Health on Chronic Disease and Diabetes

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Minority Health and Health Disparities

June 26, 2014



The Skin You're In Video Clip (7 min)

<https://www.youtube.com/watch?v=wSfH6BbTM4s>

Outline of Presentation

- **Definition of Social Determinants of Health**
- **Examples of Health Disparities in Maryland**
- **What are the Social Determinants of Health?**
- **Do Social Determinants of Health Predict Health?**
- **How do Social Factors Determine Health?**
- **How do Social Factors Impact Diabetes?**
- **Fixing Social Determinants vs. Mitigating Their Impact**
- **MHHD Logic Model**
- **Maryland Initiatives: HEZ, CIMH (SIM), PCMH, CDSMP**

Social Determinants of Health

- **The social determinants of health are the circumstances in which people are**
 - **born,**
 - **grow up,**
 - **live,**
 - **work and**
 - **age,**
- **and the systems put in place to deal with illness.**
- **These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.**

Source: World Health Organization, 2014



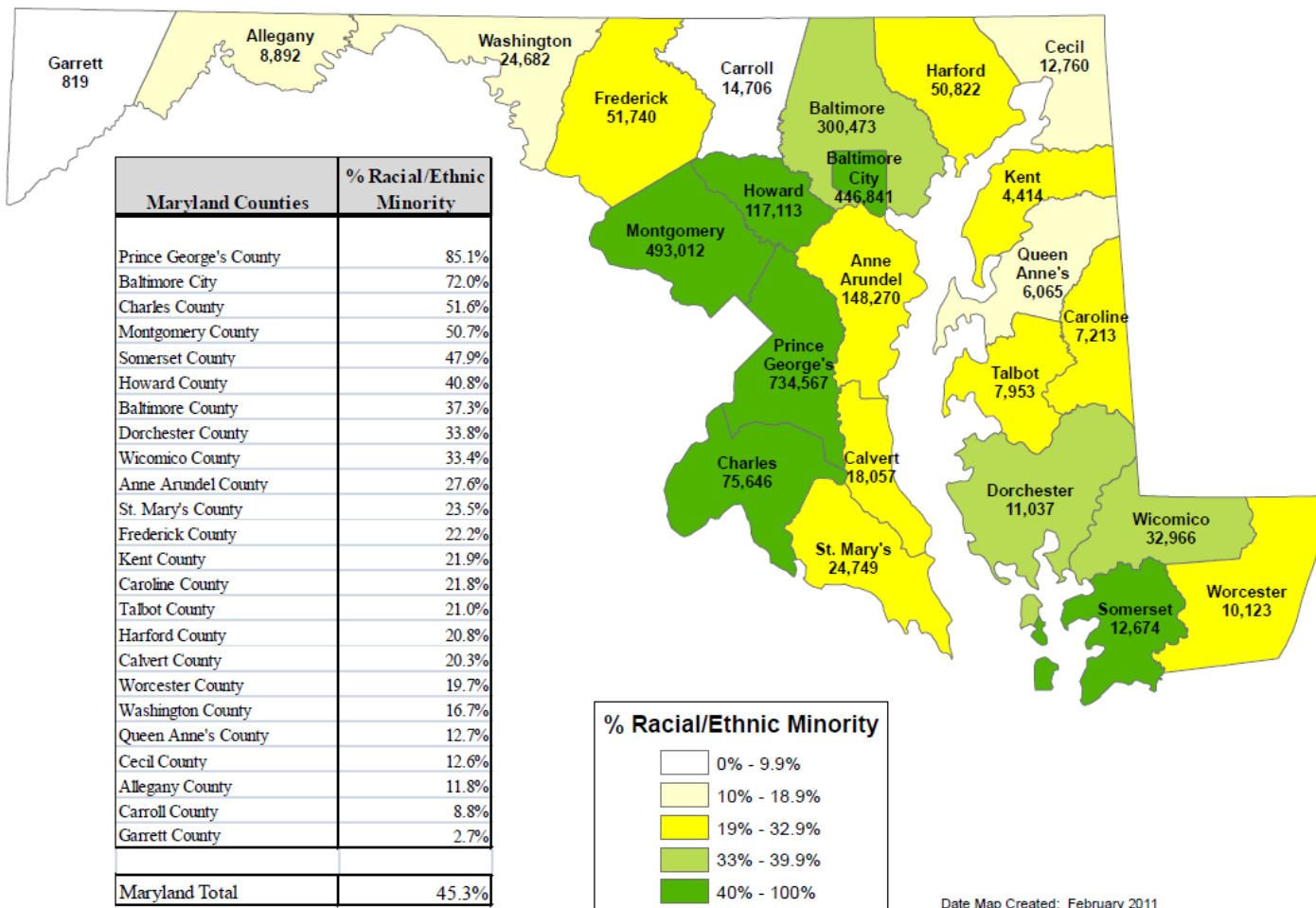
Department of Health
and Mental Hygiene
**Minority Health and
Health Disparities**

Maryland is One of the Most Racial/Ethnic Diverse States



Minority Health and
Health Disparities

Racial or Ethnic Minority Population (Number and Percent), by Jurisdiction, Maryland 2010



45% minority

**4 jurisdictions
> 50% minority**

**6 jurisdictions
>40% minority**

**9 jurisdictions
>33% minority**

**out of 24
jurisdictions**



Department of Health
and Mental Hygiene
**Minority Health and
Health Disparities**

Disparities by Race/Ethnic Group

Selected Racial and Ethnic Health Disparities in Maryland

(Shows how many times higher the minority rate is compared to the White rate)

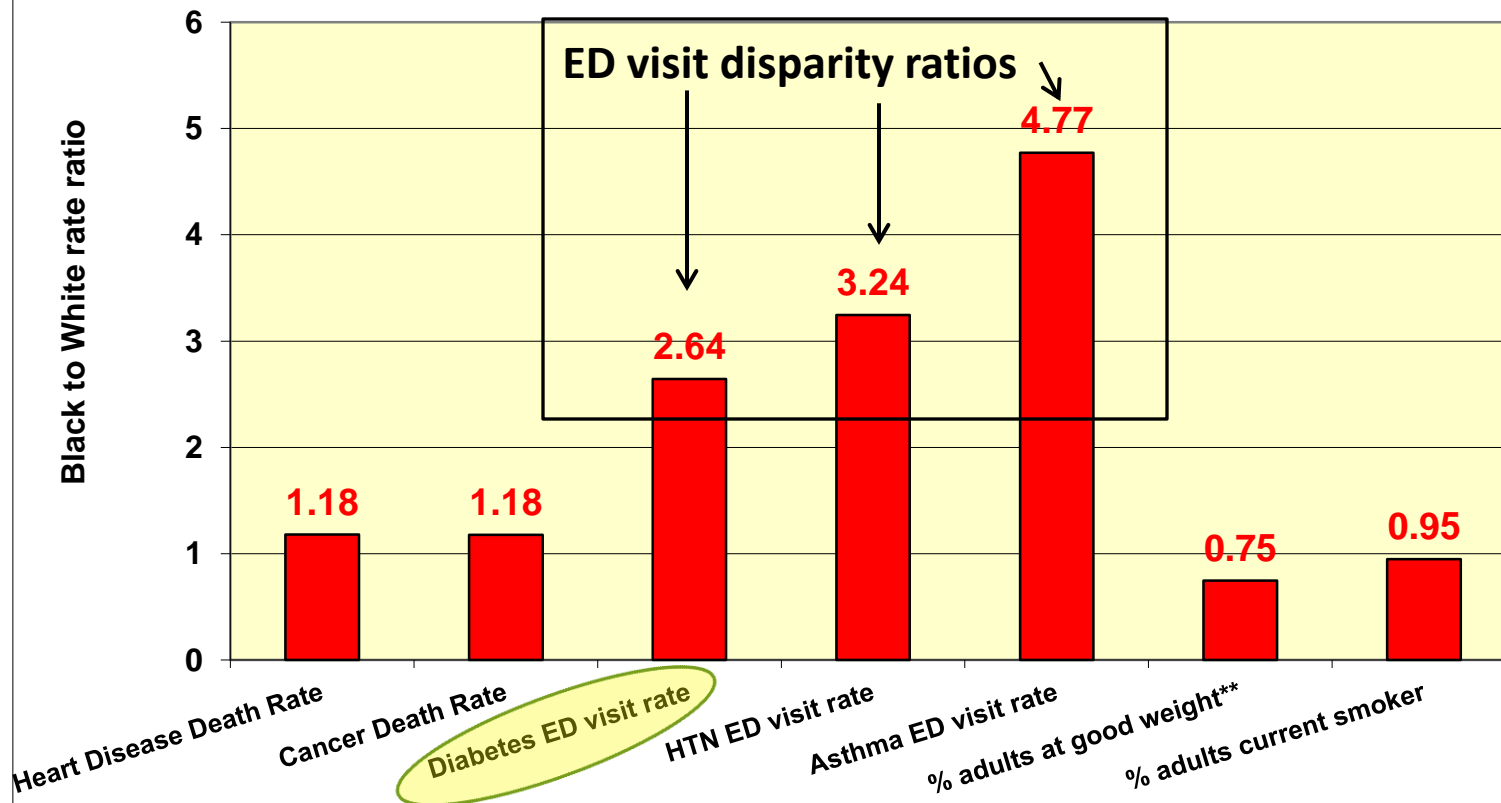
	Infant mortality	Late pre- natal care	End-stage kidney disease	No health Insurance	New HIV case rate
Black or African American	2.8	1.8	3.0	2.1	11.8
Asian or Pacific Islander	0.8	0.9	1.3	1.4	0.5
American Indian or Alaska Native	2.2	1.1	3.0	<i>Not Reported</i>	2.2
Hispanic or Latino	0.9	2.1	1.3	5.4	3.6

40% of end-stage kidney disease is due to diabetes

ED Visit Rate Disparities

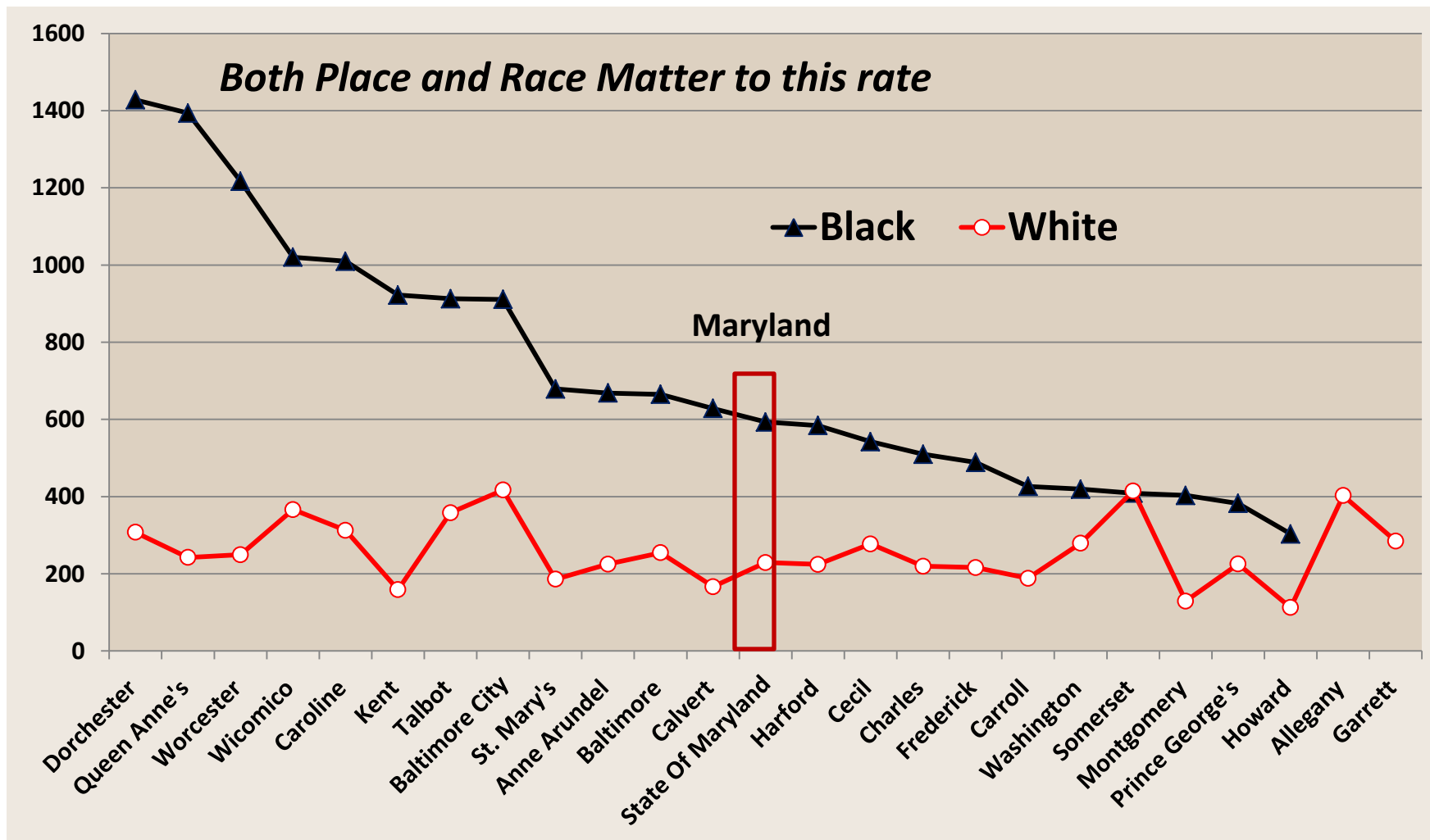
Black vs. White

**Black to White Rate Ratio for Selected Chronic
Disease Metrics, Maryland SHIP data as of June 2014**



(For % good weight, higher is better, so Blacks are 25% worse)**

Unadjusted ED Visit Rates per 100,000 for **Diabetes**, by County, Black vs. White, Maryland 2011 (Maryland SHIP data)



Hospital Admission Rate **Disparities Black vs. White**

- *For Ambulatory Care Sensitive Conditions (or AHRQ Prevention Quality Indicators) for Maryland:*
- **Leg Amputations: Black rate is 2.4 times higher**
- **Diabetes with long term comp 2.9 times higher**
- **Diabetes with short term comp 2.9 times higher**
- **Uncontrolled Diabetes 4.6 times higher**
- *(data from AHRQ State Snapshots as presented in the MHQCC Health Disparities Workgroup Report)*

Cost of Disparities **in Maryland**

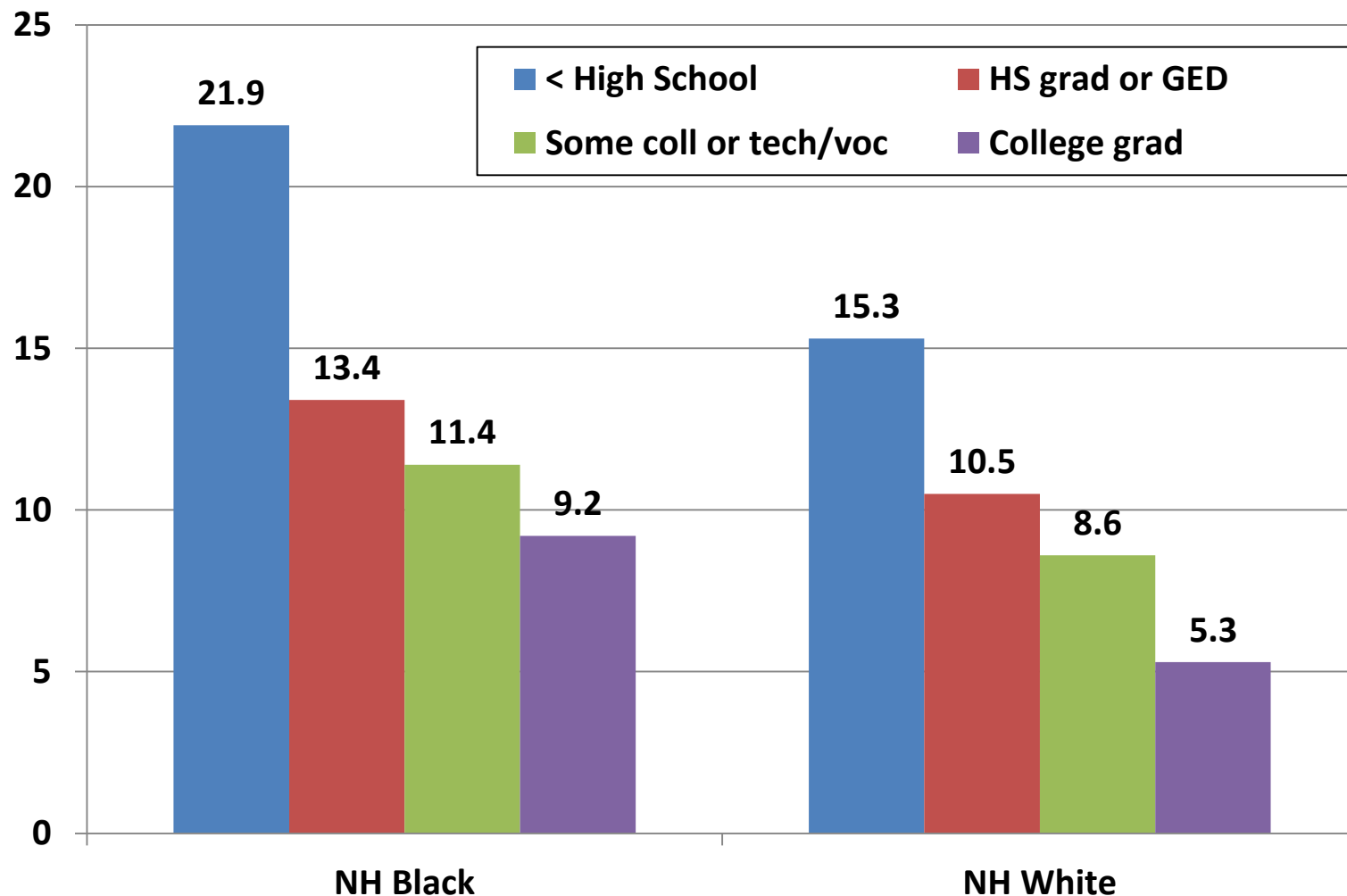


- **Minority Health Disparities cost Maryland between 1 and 2 Billion Dollars per year of direct medical costs.**
- **Excess charges from Black/White diabetes hospitalization disparities alone were \$ 37 Million in 2011.**
- ***These are just the hospital charges , NOT including physician fees for hospital care, emergency department charges, or any outpatient costs.***

What Are the Social Determinants of Health?

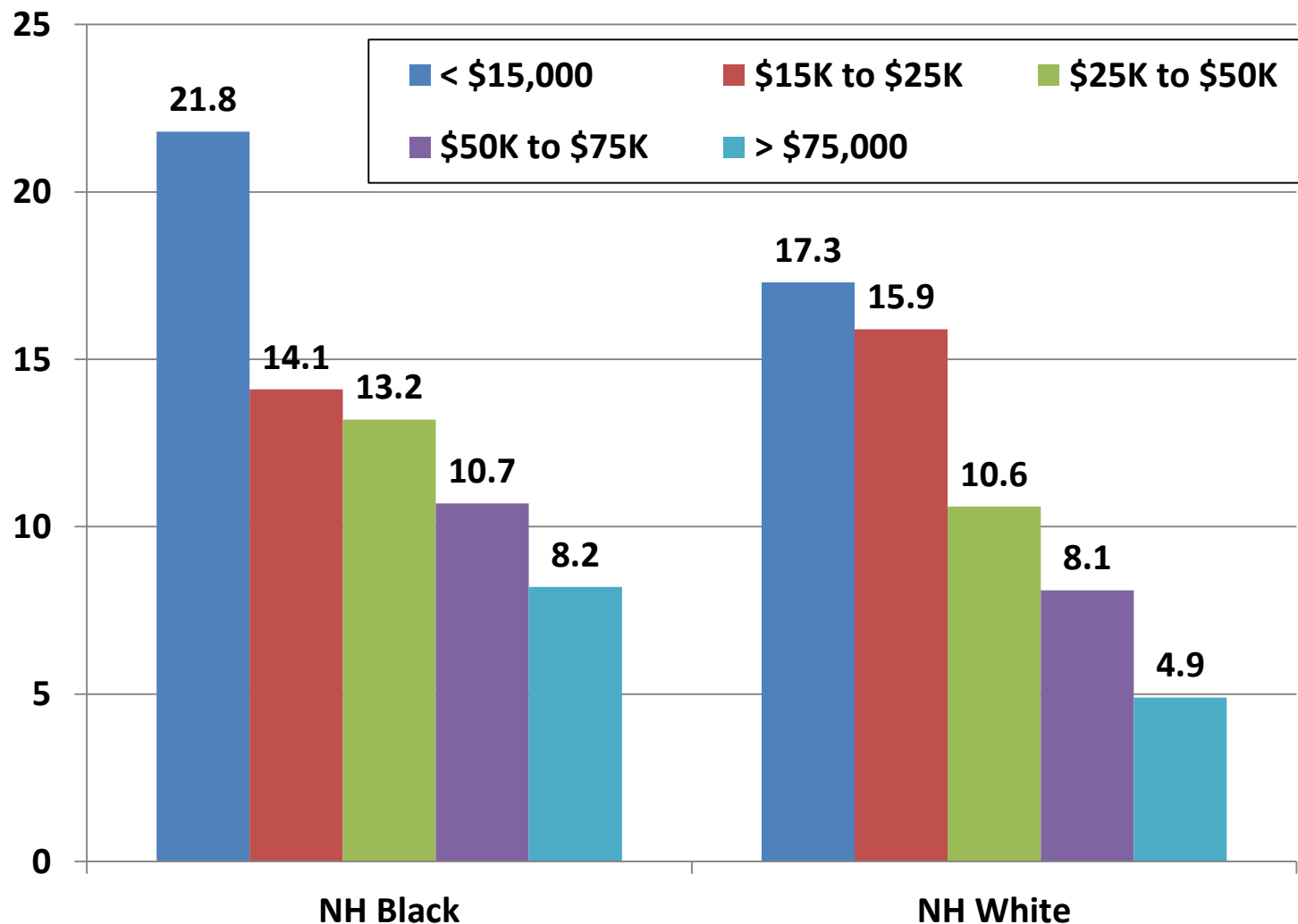
- **Access to Quality Healthcare**
- **Physical and Built Environment**
 - Housing (safe vs. dangerous)
 - Food Deserts (vs. access to healthy food)
 - Transportation
 - Toxic Exposures (vs. clean environment)
 - Safe physical activity, walkability
 - Violent crime (vs. personal safety)
- **Socioeconomic Status**
 - Education
 - Employment (vs. unemployed)
 - Income and Wealth (vs. poverty)
- **Racism, and others ...**

Diabetes Prevalence by Educational Attainment And Race Maryland BRFSS 2006-2010 Combined



Diabetes Prevalence by Income and Race

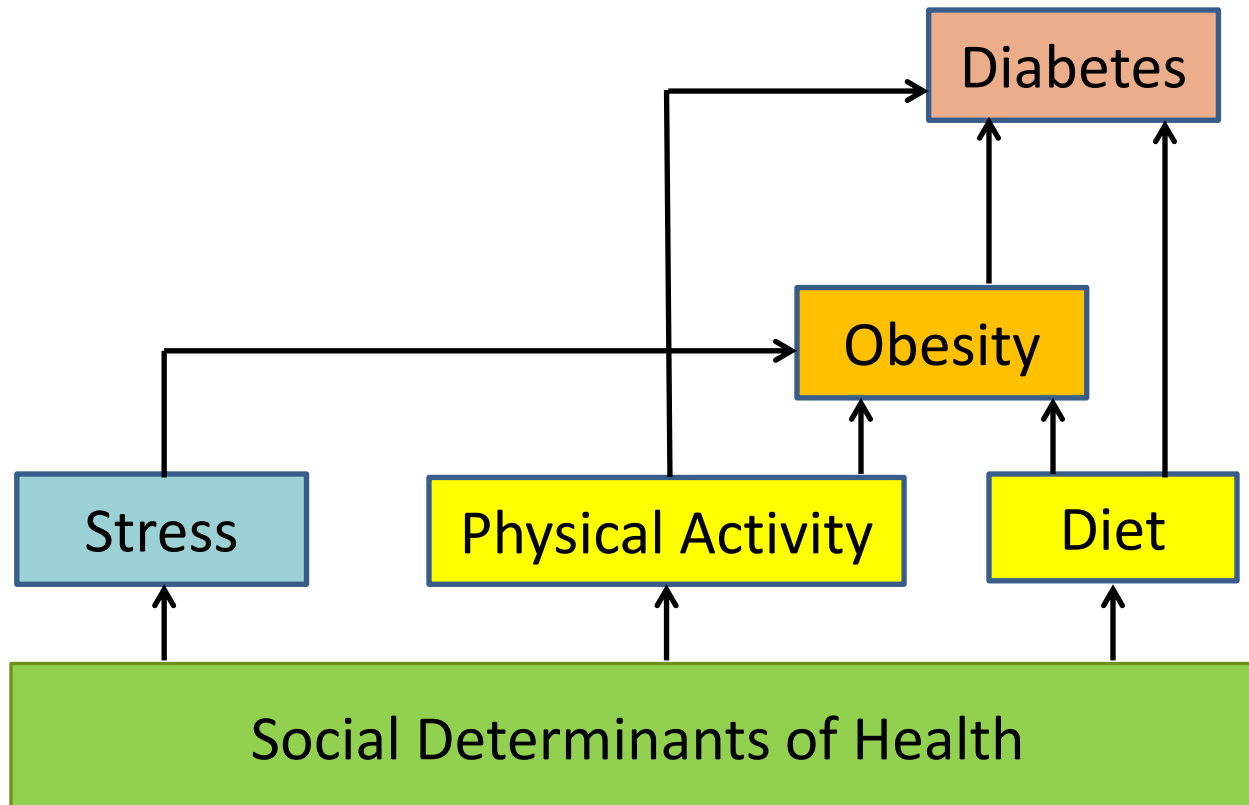
Maryland BRFSS 2006-2010 Combined



How Do Social Factors Determine Health?

- Access to Healthcare
- Capacity for Self-Care
 - Education
 - Income
 - Available healthy food and safe exercise
- Safety and Risk
 - Violence
 - Toxins
 - Housing stock
- Chronic Stress
 - Racism
 - Poverty
 - Housing, food, utilities, health care insecurity

How Do Social Factors Determine Diabetes ?





Fix Social Factors vs. **Mitigate Impact**



- **Social determinants of health can seem like daunting problems to solve.**
- **Public health cannot solve them alone, and solutions will take time.**
- **Public health seeks to find interventions that can mitigate the adverse effects of poor social determinants of health in the short run,**
- **While the longer-term solutions to the social problems are being implemented.**

MHHD Logic Model

- **MHHD has experience deploying five key strategies that optimize program benefit for minority populations:**
 - ***Race/ethnic/language data collection and analysis***
 - ***Inclusion of and outreach to minority communities***
 - ***Cultural/linguistic/health literacy competency***
 - ***Workforce diversity***
 - ***Attention to social determinants of health***

MHHD Five Key Strategies

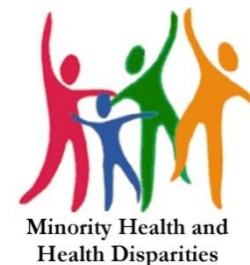
■ **REL data collection:**

- inside the healthcare (the EMR);
- in tracking the productivity of CWs and CHWs;
- in tracking outreach and community services;
- and in tracking the outcomes of preventable utilization and costs

■ **Cultural competency training:**

- Provided to workforce at all levels

MHHD Five Key Strategies



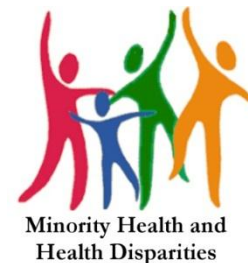
■ **Inclusion and outreach:**

- Minority communities are included at planning stage
- Explicit minority outreach efforts, with explicit minority focused messaging, are deployed.

■ **Workforce diversity:**

- Provider, provider staff, case workers, community health workers and other personnel should reflect the diversity of the community served

The Need for Balance: Attention to Community



- Many previous interventions have focused primarily on the provider side of the equation.
- We must add the important community element.
- The community elements are the most important for achieving results:
 - Chronic disease is **not managed in provider offices, or at pharmacy counters.** It is managed in patients' homes. Providers write treatment plans. It is the plan execution by patients that determines outcomes.



Role of Community Health Workers



- An effective way to increase treatment plan adherence in minority communities is to deploy **Community Health Workers.**
- Community Health Workers, recruited from the community to be served,
 - Are an key resource to help patients follow plans, and
 - Can link patients to community resources that help to mitigate the adverse impact of **disparities in social determinants of health**



Other Maryland **Initiatives**



- **Health Enterprise Zones (DHMH and CHRC)**
- **Community Integrated Medical Home (*SIM project*)**
- **Patient Centered Medical Home programs (MHCC)**
- **Chronic Disease Self-Management Program (Dept. of Aging)**
- **Healthiest Maryland (MHQCC)**



Journal of the American College of Nutrition A Review of Family and Social Determinants of Children's Eating Patterns and Diet Quality



Public Health Reports Volume 128 Supplement 3: Applying Social Determinants of Health to Public Health Practice



Oxford University Press on behalf of the International Epidemiological Association: Food Environments and Obesity— Neighbourhood or Nation?



<http://www.healthypeople.gov/2020/LHI/socialDeterminants.aspx> **HealthyPeople.gov**

Social determinants are in part responsible for the unequal and avoidable differences in health status within and between communities.

*Equity Matters Baltimore's
Community Health Equity
Report*



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